

What does this patient have a pleural effusion origin?
Choporova A.I., Mouhammad Dali
Kharkov national medical university, Ukraine, Kharkov

Introduction. Pleural effusion (PE) is a common finding among patients presenting with respiratory symptoms. It indicates the presence of a disease that may be pulmonary, pleural, or extrapulmonary in origin. Twenty percent of PE cases among all attendances to general medical outpatient department remain undiagnosed despite extensive investigations. Whereas tuberculosis is the most common cause of exudative PE (67.5%), the incidence of parapneumonic effusions ranges from 20% to 57%. There is a considerable variation in the aggressiveness and course of parapneumonic and granulomatous effusions, and, therefore, the spectrum of the appropriate therapy may vary from a conservative approach in uncomplicated effusions to aggressive intervention in a advanced multiloculated empyemas.

Purpose. To appraise the diagnostic accuracy of the routine investigations to diagnose a pleural effusion origin, which becomes customary in the phthisiatrician practice.

Materials and methods. This descriptive study was conducted in outpatient department of Kharkov regional anti TB dispensary №1. Cases were confirmed through history, clinical examination and routine investigations. In every patient informed consent was taken, followed by detailed clinical history including occupation and contact with tuberculosis patient. A thorough clinical examination was performed, looking for signs helpful in the diagnosis of the cause of effusion. A posteroanterior and lateral X-ray chest was performed in all cases. The cause was confirmed by laboratory investigations which included Hb, TLC, DLC, ESR, along with serum protein levels. Mantoux test, sputum for acid fast bacilli (AFB) where indicated. In some cases CT chest and bronchoscopy were also done where necessary. Pleural fluid was aspirated and examined for color, total proteins and cholesterol, cell, AFB and bacterial culture.

Results. Pleural puncture was performed in 17 patients with pleural effusions; 33(66%) males and 17(34%) females. The average age was 47±22.2 years. There were 100% exudates. Out of 17 cases, 40 (88.8%) had a granulomatous inflammation, 10(25%) parapneumonic.

Regarding symptoms of patients who presented with pleural effusion, non-productive cough was mostly found in 43(86%) patients, 33 patients with chest pain, 18 patients (36%) presented with breathlessness, whereas 22 patients (44%) had fever.

Conclusion. Tuberculosis was the commonest cause of pleural effusion (78 (70.9%) even though etiologic diagnosis was difficult followed by parapneumonic effusion 36 (32.7%) and TB empyema 27 (24.5%). A thorough laboratory tests and X-ray examination in two position will be interpreted in conjunction with the physicians clinical acumen. It has a high diagnostic yield in detection of pleural effusion origin in phthisiatrician practice.